



Administrative Procedure

PRC-PRO-SH-40112

Roof Assessment Process

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Project: CH2M HILL Plateau Remediation Company
Topic: Occupational Safety & Industrial Hygiene

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<h1>Administrative Use</h1>

Roof Assessment Process**Published Date: 5/27/2009****Effective Date: 5/27/2009****CHANGE SUMMARY****AJHA:** N/A**Periodic Review Due Date:** 5/1/2014**HRB Date:** N/A**Validation Date:** N/A**Rev. 0, Chg. 1 PR#:** PRC-09-0452**USQ Screen Number:**

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Description of Change

5/16/09 - Editorial changes to align with current CHPRC procedures format, and reference and form numbers and titles.

4/29/09 - This new procedure defines the process for determining the capability of a roof to support the personnel, equipment, and/or materials required to perform a planned activity. The activity was initiated as a corrective action in response to a 1992 fatality at Hanford's 105-F Building.

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1.0 INTRODUCTION

1.1 Purpose

This procedure defines the process for determining the capability of a roof to support the personnel, equipment, and/or materials required to perform a planned activity.

This activity was initiated as a corrective action in response to a 1992 fatality at Hanford's 105-F Building.

1.2 Scope

This Level 2 administrative procedure applies to all structures identified in Crystal Reporting System data base's *CARETAKER* folder, *Reports* sub-folder, *Building Management List* sub-folder that is assigned to CH2M HILL Plateau Remediation Company (CHPRC).

1.3 Applicability

- Roofs on all CHPRC assigned structures shall receive and pass a *Good Faith Roof Assessment* or Engineering Inspection prior to employee roof access.
- Containerized Cargo Containers are exempt from this procedure.
- The following structures require only a *Good Faith Roof Assessment* prior to employee access:
 - Roofs of mobile offices with no known current structural defects.
 - Roofs of maintained structures with no known current structural defects.
- The following types of roofs require an engineering inspection:
 - Roofs of unmaintained or abandoned structures
 - Roofs of structures suspected to have structural damage or extensive water damage
- A Good Faith Roof Assessment is not required if written documentation provided by a qualified engineer states that the structural integrity of the roof(s) is adequate for the type of work to be performed,
- Neither a Good Faith Roof Assessment or Engineering Inspection is required
 - Provided the criteria listed under 2.1.2 "previous assessments" are met.

If written documentation provided by a qualified engineer states that the structural integrity of the roof(s) is adequate for the type of work to be performed.

1.4 Implementation

- This procedure replaces HNF-PRAC-30498, *Roof Assessment Procedure*.
- This procedure is effective upon publication.

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2.0 PROCESS**2.1 Roof Access Pre-planning**

Actionee	Step	Action
NOTE:	<i>The date of the last Good Faith Roof Assessment and/or Engineering Inspection is available by accessing the Crystal Reporting System database's CARETAKER folder, Roof Inspection sub-folder.</i>	
Planner / Scheduler, or Manager	1.	<p>DETERMINE if the date of the most recent <i>Good Faith Roof Assessment</i> and/or Engineering Inspection is within limits for use on a task requiring roof access.</p> <ul style="list-style-type: none">Print the specific file if the subfolder information indicates the <i>Good Faith Roof Assessment</i> and/or Engineering Inspection was conducted within the acceptable time frame (1 year for a <i>Good Faith Roof Assessment</i> and as indicated in the Engineering Inspection report).Place the printout in the work package.
	2.	<p>Determine if previous assessments or inspections may be used provided the following criteria are met:</p> <ul style="list-style-type: none">The assessment or inspection is considered "passed"The assessment or inspection is signed by those performing the review.The load limits (personnel, equipment, materials, and refuse) stated will not be exceededGood Faith Roof Assessment is less than year oldEngineering Inspection duration of use has not been exceeded that which is listed in the Inspection documentation
	3.	<p>NOTIFY the Building Manager of the need for a new <i>Good Faith Roof Assessment</i> or Engineering Inspection if the Crystal Report CARETAKER information indicates the timeframe between evaluations has been exceeded.</p>
Building Administrator	4.	<p>SCHEDULE a <i>Good Faith Roof Assessment</i> or Engineer Inspection as requested to support pre-job planning of a task requiring roof access.</p>

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2.2 Good Faith Roof Assessment

Actionee	Step	Action
Building Manager	1.	ASSEMBLE team to conduct a <i>Good Faith Roof Assessment</i> . <ul style="list-style-type: none"> The team consists of a minimum of three members: the building manager, an engineer, and a project safety professional. The Union Safety Representative may be considered as an optional Team member
	2.	CONDUCT a pre-job briefing with the team per PRC-PRO-WKM-079, <i>Job Hazard Analysis</i> .
Assessment Team Members	3.	COMPLETE a self-study of this procedure prior to participating in an assessment.
	4.	COMPLETE the <i>Good Faith Roof Assessment</i> (form A-6004-781) including: <ul style="list-style-type: none"> OBTAIN AND RECORD the weight of the intended load to be placed on the roof during the activity (number of employee's times 300 pounds, plus the weight of equipment, plus the weight of materials) ASSESS the structure's outer and inner walls to determine the condition of, and potential damage to, the structure. ASSESS the underside of the roof first (to the extent possible) to determine its condition and potential damage to it. ASSESS the roof to determine its condition and potential damage.
	5.	DOCUMENT the outcome of the assessment by placing an "X" in either the "passed" or "did not pass" box on the <i>Good Faith Roof Assessment Cover Sheet</i> .
	6.	SIGN the completed <i>Good Faith Roof Assessment</i> form.
	7.	PLACE an "X" in the "did not pass" box on the <i>Good Faith Roof Assessment Cover Sheet</i> and initials the entry if a member determines that an Engineering Inspection is required.
	8.	PLACE a copy of the <i>Good Faith Roof Assessment</i> (Cover Sheet, Checklist, and Finding Sheet) in IDMS with distribution to the designated single point-of-contact for architectural/engineering roof inspections, the building manager, and the projects safety manager.
	9.	PROVIDE a copy of the "passed" <i>Good Faith Roof Assessment</i> to the requesting Planner/Scheduler or Manager to be made part of the pre-job planning documents.

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
	10.	<p>A "did not pass" assessment is handled in one of the following ways:</p> <ul style="list-style-type: none"> It is referred to the Engineering Inspection team for further investigation. The activity is canceled and a copy of the assessment is entered into IDMS by the building manager.
	11.	<p>Newly constructed (within the past calendar year), undamaged roofs may be assessed as follows (in lieu of a good faith assessment):</p> <ul style="list-style-type: none"> The Good Faith Roof Assessment Cover Sheet is completed by the assessment team in accordance with this procedure. A review of the building/roof design specifications is completed by the Building Manager and Engineer to verify that the roof will withstand the intended load. If the information contained in the specifications is not sufficient to complete the verification, a design engineer is consulted for assistance. The reviewer signs the Good Faith Roof Assessment Cover Sheet and notes on the sheet "newly constructed roof – design specifications verified." Project safety signs the Good Faith Roof Assessment Cover Sheet. The findings from this assessment are indicated on the Good Faith Roof Assessment Cover Sheet.

2.3 Engineering Inspection

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Building Manager	1.	<p>ASSEMBLE a team to conduct an Engineering Inspection.</p> <ul style="list-style-type: none"> The team consists of a minimum of three members: building manager and two or more qualified personnel (to be determined by the Project's Engineering Manager) An Engineering Inspection may be requested any time at the discretion of the building manager, engineering, or safety.
	2.	<p>PERFORM the inspection in accordance with the WHC-SD-GN-ER 30012 Generic Inspection Plan for the Roof Deck and Support Structure for Buildings (Available on IDMS).</p>
Assigned Engineer	3.	<p>PERFORM strength calculations to verify that adequate capacity is available to allow personnel access.</p>

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	4.	CATEGORIZE the structural roof inspections results into one of the following: <ul style="list-style-type: none"> SAFE: The roof is safe for normal roof access, which is 20-psf or enough to allow a limited number of workers on the roof, but no storage of materials. RESTRICTED: Only a portion of the roof is safe for roof access, or all or part of the roof is safe for a very limited load, such as 2 workers only on the entire roof. UNSAFE: The entire roof is unsafe for personnel access until it is replaced or repaired. UNKNOWN: The entire roof could not or was not inspected and should be considered unsafe.
	5.	DETERMINE and document in the report, the length of time in which the Engineering Inspection will remain in effect.
Building Manager	6.	INCLUDE the passing engineering inspection report with the pre job planning document(s), and prove a copy to the building manager.
	7.	NOTIFY the project director of failed engineering inspections.

2.4 Completed Assessments/Inspections

Actionee	Step	Action
NOTES:	•	<i>Good Faith Roof Assessments are valid for one calendar year.</i>
	•	<i>Engineering Inspections are valid for the period specified in associated documentation.</i>
Building Manager	1.	PLACE a copy of the <i>Good Faith Roof Assessment</i> (Cover Sheet, Checklist, and Finding Sheet) in IDMS with distribution to Crystal Report Roof Inspection Summary Administrator, building manager, building manager, and the projects safety manager.
Single Point Contact - Architectural / Engineering Roof Inspections	2.	UPDATE the CrystalReport database CARETAKER Roof Inspection file for the structure having been inspected.

3.0 FORMS

Good Faith Roof Assessment, A-6004-781

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4.0 RECORD IDENTIFICATION

Performance of this procedure may generate the following records.

Records Capture Table

Name of Document	Submittal Responsibility	Retention Responsibility
CrystalReport Roof Inspection Summary	Building Manager	Crystal Report Roof Inspection Summary Administrator
Form A-6004-781), <i>Good Faith Roof Assessment</i>	Building Manager	Building Manager

5.0 SOURCES**5.1 Requirements**

Report: U.S. DOE Richland Field Office, *DOE Investigation Board Report on Fall-Related Fatality of a Construction Worker at Hanford Site 105-F Building on April 7, 1992*, Item 5. Page 5-6. Date: May 1992.

5.2 References

PRC-PRO-EN-20337, *Post-Natural Phenomena Hazard Building Inspection*

PRC-PRO-WKM-12115, *Work Management*

PRC-PRO-WKM-079, *Job Hazard Analysis*

WHC-SD-GN-ER 30012, *Generic Inspection Plan for the Roof Deck and Support Structure for Buildings* (Available on IDMS)